

WHAT IS CLAIMED IS:

1. An image data acquisition method comprising:  
scanning a sample by a light;  
receiving a light from the sample, to acquire a  
5 scanned image data; and  
storing the scanned image data obtained by  
scanning a region of a predetermined size every time a  
region scanned by the light reaches a predetermined  
size, sequentially.
- 10 2. The image data acquisition method according to  
claim 1, wherein, the size of the scanned region by the  
light is changed according to an arrangement position  
thereof, when a plurality of measurement objects are  
arranged in the sample.
- 15 3. The image data acquisition method according to  
claim 2, wherein position information on respective  
scanning regions is stored to be added to each item of  
the scanned image data sequentially stored.
- 20 4. The image data acquisition method according to  
claim 2, wherein the sample is a DNA microarray in  
which a number of spots are arranged as a measurement  
object, and the size of the scanning region is such  
that a boundary in the scanning region is not  
overlapped on the spot.
- 25 5. The image data acquisition method according to  
claim 2, wherein the scanning by the light is carried  
out by main scanning and sub-scanning in a direction

orthogonal thereto, and adjustment of the size of the scanning region is carried out by regulating the number of scanning lines of the main scanning.

5       6. The image data acquisition method according to claim 1, wherein an analysis processing is executed for the stored scanned image data in parallel with scanning of a next region when the storage of the scanned image data completes.

10       7. The image data acquisition method according to claim 6, wherein the sample is a DNA microarray in which a number of spots are arranged as a measurement object, and the size of the scanning region is such that a boundary in the scanning region is not overlapped on the spot.

15       8. The image data acquisition method according to claim 1, wherein the scanning by the light is carried out by main scanning and sub-scanning in a direction orthogonal thereto, and both of the main scanning and the sub-scanning are carried out by moving the sample.

20       9. The image data acquisition method according to claim 1, wherein the scanning by the light is carried out by main scanning and sub-scanning in a direction orthogonal thereto, and the main scanning is carried out by an optical scanner.